Uneven spatial development at the end of the world.

Production of space and urban inequalities in Ushuaia and Río Grande.

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Report

Research problem

This thesis addresses the process of uneven spatial development (USD), resulted from territorial expansion of capitalist economic activities (Smith, 2020). As long as new territories are incorporated into the accumulation process, simultaneous dynamics of equalization (of productive forms) and differentiation (of spatial forms) are generated in them. As a result, specific patterns of spatial inequality emerge, acquiring particular characteristics in the different scales and geographies (Smith, 2012; Brenner, 2009). Considering a Latin American approach, urban inequalities remain particular interest, given the fact cities concentrate most of the resources and the population. The State is crucial in defining the precise patterns that USD acquires through its economic and urban-territorial policies.

This research frames the study problem in the context of national territory of Tierra del Fuego (TDF), Antarctica, and the South Atlantic Islands, constituted as a province of Argentine Republic in 1991. Due to geopolitical issues related with its strategic location in the South Atlantic Ocean, Argentine government promoted specific policies in order to encourage its population. For accomplished this purpose, this territory was defined a Special Economic Zone (SEZ) in 1972, and tax advantages were given to any productive activity. This resulted in the establishment of industries, dedicated to consumer electronics-specific sectors, which demanded a significant number of new labor. The industries settled in the only two existing urban centers on the Isla Grande of TDF at that time, Ushuaia and Río Grande. Consequently, this cities grew rapidly and continuously as a result of significant internal migratory dynamics. However, economic impulse was not accompanied by urban planning regulations and housing accessibility policies.

As a result of urban sprawl under scarce state management, and the lack of available housing, informal production of the city began to grow. Informality is a characteristic modality of Latin American urbanization, in which the inhabitants generate itself their own living conditions, outside formal channels. Informal settlements expanded, within worse habitability conditions than the formal city (Clichevsky, 2000, Cravino, 2006). Numerous problematical issues can be mentioned, related to

their irregular land tenure situation and their location in undeveloped areas. Among them, the following stand out: lack of access to essential services, localization in environmentally hazardous places, and more precarious housing. Moreover, symbolic distinctions and social stigmatization processes in addition to the mentioned physical problems.

Over the last fifty years, USD patterns within and between Ushuaia and Río Grande have been directly affected by linkages each city established with industry, by rising real estate speculation, and by new forms of space valorization related to international tourism. The emergence of new land and housing commercialization dynamics since 2003, as well as the role of urban housing policy, increased informality.

Given to the impact caused by productive extra-urban dynamics (industry and tourism), as well as the ones caused by internal dynamics of mercantilization and decommoditization (including state and informal urban-housing production), inequalities consolidated in the cities, particularly between the formal and informal areas. The State played a central role in defining the spatial patterns of inequality. On one hand, through the promotion of economic dynamics. On the other hand, through its direct urban actions in the cities: as a planner, as a producer of housing solutions, as a regulator/facilitator of the urban mercantilization process and through policies that addressed (or not) informality (Reese, 2006, Fernández Wagner, 2009).

Therefore, research object focused on the causes and patterns urban inequality acquires in Tierra del Fuego cities under particular USD dynamics, from a multi-scale perspective. The **general objective** is to analyze the USD dynamics that have intervened in the production of cities and of urban inequalities in Tierra del Fuego, since its definition as a Special Economic Zone in 1972, until 2020. The **particular objectives** are: 1) to identify the territorial structuring, conditioning factors and occupation patterns of the fuegian urban space, prior to 1972; 2) to analyze the productive and sociodemographic dynamics fomented at the extra-urban level that influenced the transformation of the fuegian productive-territorial structure (1972- 2019; 3) to analyze the intra-urban dynamics of expansion, mercantilization and demercantilization of Ushuaia and Río Grande (1972- 2019); and 4) to identify the patterns of urban inequality in Ushuaia and Río Grande (2020).

In summary, the major differences between formal and informal city in Ushuaia an Río Grande, respond to a specific form of USD, which exhibited typical characteristics of Latin American urbanizations processes. Nevertheless, peculiarities of the considered cases might be stands out, related to a double condition; eventough being in a remote and periphery geography, they are simultaneously situated in a region of important geopolitical value. According to the argument, production of urban space in TDF is influenced by fragmented local and federal policies. This led to an economic and special decoupling at various scales with unequal, combined, and conflicting territorial and social effects. A comparative historical research using spatial analysis is proposed as a methodology, along with qualitative and quantitative approaches.

Relevant current research in the scientific field

Urban inequalities have increased in many cities since the beginning of neoliberalism (Secchi, 2015). While they are commonly associated to intra-urban dynamics (Harvey, 1977), it has been suggested by critical urban studies (Brenner, 2009 b) that they are also a component of larger dynamics of unequal spatial development. The USD theory provides central elements for a multi-scale understanding of the economic, political and spatial forms that directly affect the territorial configuration of inequalities. According to Smith (1984, 1996/2012), Harvey (2007), and Brenner (2009 a), USD is an essential process in the creation of capitalist space, based on a fundamental contradiction: as capital expands, it homogenizes territorial aspects while also generates differences by favoring some locations over others for accumulation. Equalization and differentiation dynamics change throughout time, across different geographies, and at various spatial scales. USD finds its most concrete form in cities (Brenner and Schmid, 2015).

Among the dynamics of urban equalization, Smith (2012) highlights central role cities play in broader processes of accumulation, together with intra-urban dynamics of valorization, such as commodification of land and housing. Besides, he emphasizes the role land rent play as primary cause of socioeconomic and urban differentiation. Both dynamics generate conflicts among actors who conceive cities either as goods for use or goods for exchange (Pradilla Cobos, 1987). Urban housing policies are crucial in regulation or facilitation of the differentiation process (Pírez, 2016).

Particular urban growth dynamics and inequality configurations emerged in latin american cities, as a result of specific forms thorough which the continent was incorporated into the global accumulation process (Pradilla Cobos, 2014). The late and peripheral insertion into industrial capitalism stimulated accelerated processes of urban sprawl under scarce planning criteria. Deficiencies in planning and housing policies led to a large percentage of inhabitants having to solve their housing needs outside formal channels (Clichevsky, 2009). As a result, the informal city emerged, a distinctive method of producing urban space in Latin America, (Clichevsky, 2000; Cravino, 2016). According to Abramo (2012), Jaramillo (2008; 2009), and Fernandes (2011; 2016), neoliberalism has led to an increase in informality, due to the expansion of commercial practices over urbanization trends, such as gated communities, suburbanization, and renewal processes in central areas. Commoditization and the lack of affordable housing, led to informal settlements growing over undevelopable areas, defining increasingly precarious ways of inhabiting (Di Virgilio y Rodríguez, 2016). The strongest aspect of urban inequality in Latin America is the increasing segregation between formal and informal produced spaces (Pírez, 2014 a; 2016).

USD discussions acquires a special significance in Latin American territories that have been impacted by regional-economic promotion strategies, such as Tierra del Fuego (TDF). In this sense, it can be mentioned research works that address the inequalities produced in Manaus (Brazil) and

Ciudad Juarez (Mexico), as a result of their insertion into global capitalism through industrial promotion (Rodríguez Álvarez, 2002; Kanai, 2014). These studies, however, are scarce and do not provide comparative criteria for analyzing the phenomenon in other case studies. Regarding TDF, on one hand, there can be found antecedents that addressed transformations and economic implications of the industrialization process (Roitter 1987; Kosacoff and Azpiazu, 1989; Filadoro, 2007; Mastrocello, 2008; Schor and Procelli, 2014). On the other hand, researches addressed certain aspects of the production of urban spaces. Among these last ones, it can be recognized research dedicated to the study of urban housing policies (Martínez and Finck 2017; Finck, 2019; Martínez, Finck, Lobato, 2019) as well as to the growth of urban informality in recent times (Alcaraz, 2015). However, there is still scarce knowledge on the relationships between economic and territorial dynamics that explain the USD process and address the spatial patterns of urban inequality. In this sense, this research aims to make theoretical and methodological contributions from a Latin American perspective, for the interpretation of the USD process and its patterns of urban inequality in peripheral territories of strategic geopolitical value.

Methodologies

With the aim of generating contributions to the USD theory (Chetty, 1996) a comparative case study was conducted to address the USD issue in the TDF cities. The cases concern the cities of Ushuaia and Río Grande, where the implementation of a policy of economic promotion (the definition of TDF as a ESZ) led to various spatial disparity configurations. The comparison served as a method for creating critical knowledge (Mac Farlane, 2010). Based on the theoretical articulation of USD and Latin American urban studies, this research required the creation of its own methodological approach. Four analytical components were identified from a multiscale and historical approach:

- Pre-existing territorial structure: the Fuegian territory prior to its definition as an EEZ was characterized. Both geographical characteristics and those related to the historical occupation process were taking into account.
- Extra-urban dynamics: the causes and evolution of the productive, socio-demographic and territorial transformations of TDF and its cities were analyzed (inter-urban comparison), since its definition as an ESZ (1972 to 2019).
- Intra-urban dynamics: a comparative analysis was made of the urban expansion of Ushuaia and Río Grande, the evolution of housing conditions and the identification of the dynamics of commoditization and decommoditization involved in their production (1972 to 2019).
- Urban inequalities: patterns of spatial inequality in Ushuaia and Río Grande were identified according to the dynamics of (de)commoditization, and conditions of affordability and urban vulnerability were recognized in the cities in 2020.

The methodology used a mixed-design approach, incorporating spatial, quantitative, and qualitative analysis techniques, considering the numerous benefits of their triangulation (Cantor, 2002). Spatial approach was central in this research. It materialized in the creation of cartographic products using two main techniques: interpretative spatial diagrams (ISD) made by self-created hand drawings, and maps created by geographic information systems (GIS). These resources served as both primary data sources and result synthesis analysis. Interviews, field trips, documentary and statistical analysis, were employed as complementary techniques.

Main results

The USD process initiated with the definition of TDF as an ESZ, originated the current patterns of urban inequality in Ushuaia and Río Grande. The analysis of the conditions of each city and the extra- and intra-urban dynamics allowed us to arrive at comparative results. The particular geographical conditions of TDF, as well as the stages of capitalist valorization that took place until 1970, influenced the processes of historical occupation of the cities. Ushuaia, located to the south and isolated by the Andes Mountains, grew by state initiatives and consolidated as administrative capital. Río Grande, with a better relative geographic position, consolidated as an economic center. Both were small towns until 1970. Land ownership, mostly public in Ushuaia and private in Río Grande, had a strong influence on subsequent urban growth patterns and inequality. The particular geographical conditions of TDF, as well as the stages of capitalist valorization until 1970, influenced the processes of historical occupation of the cities.

The industrialization process initiated in 1972 with the definition of TDF as an EEZ, transformed the productive-territorial structure and produced a great migration. The population grew by 940% between 1972 and 2019, with Ushuaia and Río Grande receiving 97% of the inhabitants. Its urbanization was directly impacted by this. Urban sprawl in Ushuaia grew by 1,000% while Rio Grande grew by 500%. Urban informality increased in both cases, result of the disconnection between policies that supported the economy and population growth, and policies that attended urban and housing growth. Spatial analysis show informal settlements represented 41% and 37,5% of Ushuaia and Río Grande respectively urban sprawl, between 1972 and 2019.

The differences between formal and informal urban production, constitute the main form of inequality in both cities, although with differences and similarities in each case:

- The industry displayed both positive and negative cycles during the study period (1972-1991; 1992-2002; 2003-2015; 2016-2019) which had a varied effect on the rise of informality. Río Grande became a more established industrial hub, and with it, informality increased during periods of industrial boom.
- In Ushuaia, the growth of tourism brought to new dynamics of differentiation through the renovation and modernization of central areas.

- Along with industry and tourism, dynamics of commoditization of urban spaces emerged, reflected in the creation of exclusive residential areas (closed neighborhoods) and in the rise of real estate speculation. In Ushuaia they began during 1990 decade, while in Río Grande since 2003. In both cases they intensified it extend during the last industrial boom and contributed to the growth of urban informality due to an overvaluation of urban land prices and rents.
- The role of urban housing policies applied in each case was central to the processes of internal differentiation. Housing planning and housing production policies were disjointed from economic dynamics, and thus could not meet the demands in a timely manner. In Ushuaia, policies mostly favored mercantile practices, while at the same time were more intolerant of the growth of informal settlements.

The USD process generated specific patterns of inequality through the formation of homogeneous landscapes, where three opposing city projects (mercantile, state and informal) coexist, physically segregated and with marked differences. In both cities the market generated exclusive urban environments in the periphery, while in Ushuaia it also provoked a process of renovation of the central area linked to tourism. Affordability conditions in the land market are worse in Ushuaia, while the rental market is difficult in both cities. In both cities, informality is geographically and socially disconnected and presents the worst urban vulnerability indexes.

Areas of potential additional research

This research incentives at least three possible lines of future work, linked to the study of territorial inequalities in comparative terms.

The first line would aim at deepening theoretical-methodological studies on USD. Given that the methodology was proposed for a case analysis, from the field of critical urban studies, other cases are of interest in order to observe the dynamics that operate in the production of urban inequalities in other contexts and to strengthen the theoretical contributions.

The second line would address studies dedicated to understanding the relationships between urban inequality patterns and the role of the State. It is of interest to verify in different cases how planning policies, housing production, regulation and/or facilitation of commercial practices affect the production and distribution of actors in the territory as well as the differentiation of inhabited spaces.

The third line would consider the production of urban inequalities caused by tourist activity. It is interesting to analyze in other cases the intra-urban valorization processes associated with this activity, which produce particular dynamics of internal differentiation.